

287031

JPRS 81562

17 August 1982

# Worldwide Report

TELECOMMUNICATIONS POLICY,  
RESEARCH AND DEVELOPMENT

No. 233

19981208 049

Reproduced From  
Best Available Copy

**FBIS**

FOREIGN BROADCAST INFORMATION SERVICE

REPRODUCED BY  
NATIONAL TECHNICAL  
INFORMATION SERVICE  
U.S. DEPARTMENT OF COMMERCE  
SPRINGFIELD, VA. 22161

6  
52  
A04

#### NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [ ] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

#### PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

17 August 1982

WORLDWIDE REPORT  
TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

No. 233

## CONTENTS

## ASIA

## AUSTRALIA

Details Reported on Satellite, Pay TV for Outback  
(David Noble; THE SYDNEY MORNING HERALD, 15 Jun 82)..... 1

Briefs  
Solar Phones 2

## BANGLADESH

Plans To Extend Telecom Network Told  
(THE BANGLADESH OBSERVER, 14 Jul 82)..... 3

University Professor Develops Indigenous Microcomputer  
(S.M.A.K. Mojahedy; THE BANGLADESH OBSERVER,  
16 Jul 82)..... 4

## INDIA

Delhi Meeting Discusses Information for Third World  
(PATRIOT, 17 Jul 82)..... 5

Committee Gives Guidelines for Radio, TV News  
(THE HINDU, 14 Jul 82)..... 6

INSAT-1A Called Symbol of Inefficiency  
(S. Kumar; THE TIMES OF INDIA, 15 Jul 82)..... 8

Telecommunications Expansion Planned for Northeast  
(PATRIOT, 18 Jul 82)..... 9

Doubts Expressed About French Phone Technology  
(THE TIMES OF INDIA, 19 Jul 82)..... 10

Positioning of Satellites Discussed in Rajya Sabha (PATRIOT, 20 Jul 82).....	11
Briefs	
Devanagari Keyboard	12
Microprocessor Technology	12
INSAT-1A Lifespan	13
INSAT Solar Sail	13
Inadequate Use of INSAT	13
Apple Momentum Wheel	14
PAKISTAN	
Woes of Pakistani Telephone User Discussed (KHYBER MAIL, 21 Jul 82).....	15
PEOPLE'S REPUBLIC OF CHINA	
Briefs	
Xinjiang Kirgiz Broadcasts	17
EAST EUROPE	
ALBANIA	
Plans for Expanding Television Broadcasting (Agron Aranitasi, Vullnet Musaraj; SHKENCA DHE JETA, Mar-Apr 82).....	18
LATIN AMERICA	
BERMUDA	
Government Gives Unconditional OK for ZBM Takeover of ZFB (THE ROYAL GAZETTE, 10 Jul 82).....	21
CHILE	
Government Approves New Telecommunications Law (EL MERCURIO, 20 Jul 82).....	22
GRENADA	
Briefs	
Satellite Ground Station	26

## JAMAICA

Briefs	
Jamintel Development	27

## NEAR EAST AND NORTH AFRICA

### DJIBOUTI

Nationwide Telecommunications Network Put Into Service (LA NATION DE DJIBOUTI, 10 Jun 82).....	28
---	----

### UNITED ARAB EMIRATES

Briefs	
INTELSAT Membership	30

## SUB-SAHARAN AFRICA

### ANGOLA

Briefs	
No Phones to Portugal	31

### GHANA

Briefs	
Forthcoming New Radio Channel	32
Direct International Calls	32

### SWAZILAND

Establishment Television Authority Control Board Praised (Editorial; THE SWAZI OBSERVER, 10 Jul 82).....	33
---	----

Briefs	
Earth Satellite Station	34

### ZIMBABWE

Briefs	
Radio, TV License Fees	35

## WEST EUROPE

### CANADA

Quebec, France Agree on Exchanges of TV Programs (Rodolphe Morissette; LE DEVOIR, 17 Jun 82).....	36
--	----

### FINLAND

Agency Defies Ministry; Cable TV Tests To Continue (HUFVUDSTADSBLADET, 13 Jun 82).....	39
Turku Gets Country's First Optic-Fiber Phone Cable (HUFVUDSTADSBLADET, 12 Jun 82).....	41

### FRANCE

PTT Receives Private Financing To Make Up for Lost Funds (Jacques Jublin; LES ECHOS, 2 Jun 82).....	42
Briefs	
Fourth TV Station in 1983	44
Thomson-CSF in Saudi Arabia	44
Broadcasting Station in Caribbean	44

DETAILS REPORTED ON SATELLITE, PAY TV FOR OUTBACK

Sydney THE SYDNEY MORNING HERALD in English 15 Jun 82 p 15

[Article by David Noble]

[Text]

Small outback communities, outside the broadcasting areas of conventional television stations, will be able to receive a new pay television service within a few months.

The service is the brainchild of Mr John Hodgman, a marketing consultant, who last month formed Television Australia Satellite Systems Ltd.

His plan is to buy television programs from commercial networks, package them into six-hour parcels and beam them by satellite to small community television stations.

"What we are establishing is Australia's first pay TV service, a revolutionary breakthrough aimed at outback, as opposed to major centres of population," Mr Hodgman said.

"Until now, there have not been the technological advances to make these services possible."

Television Australia will provide the stations with the equipment required to receive and transmit the programs — for as little as \$25,000.

According to Mr Hodgman, this will consist of a low-power transmitter, a satellite receiving dish, video-tape equipment and, perhaps, a simple studio.

These stations will transmit programs to households in the transmission area which have television sets fitted with a decoder device to

pick up the signal.

Users will pay between \$4 and \$8 a week to the local station, which in turn will pay Television Australia \$3 a week for each participating dwelling.

At present, 14 companies have been formed to establish local stations and prepare licence applications which are expected to be granted within a couple of months.

The 14 stations cover about 30,000 dwellings in 44 of an estimated 140 towns which could use the service.

The turnover to Television Australia, therefore, at this early stage would be about \$90,000 a week — almost \$5 million a year.

Initially, video-tapes will be delivered manually to the stations but next year, with the launching of the Intelsat 4A satellite, programs will be beamed to each station by satellite.

Mr Hodgman said the service was expected to transfer from Intelsat 4A to Australia's domestic satellite, Aussat, when it is launched in 1985.

He has gathered some of the most respected figures in the telecommunications industry to help start Television Australia.

Among them are the former general manager of the Overseas Telecommunications Commission, Mr Harold White; Professor Taylor Howard of Stanford University (USA) and the former director of corporate affairs of the ABC, Mr John Hartley.

## AUSTRALIA

### BRIEFS

SOLAR PHONES--Solar-powered telephone and radio facilities will be used in construction camps on the Dampier-Perth natural gas pipeline. A contract for the telephone facilities has gone to the WA-based Photon Energy Co. Twenty small-capacity solar-powered stations will be constructed for the telephone and radio system. Each station will consist of 16 solar modules of 35 watts each, an alarm module and a charge controller. The Minister for Fuel and Energy, Mr Jones, said that the solar power concept was unusual because it was completely mobile and could be moved along the pipeline as sections were completed. "The facilities are essential for the State Energy Commission's pipeline programme and will facilitate the vital coordination of materials, plant and labour and the exchange of design information," Mr Jones said. He said that the first three systems would be delivered next month and the rest by January 1983. The Photon Energy Company is a division of Good Samaritan Industries and the WA distributor for the United States-based Arco Solar Inc. [Text] [Perth THE WEST AUSTRALIAN in English 14 Jun 82 p 22]

CSO: 5500/7553



# PLANS TO EXTEND TELECOM NETWORK TOLD

Dacca THE BANGLADESH OBSERVER in English 14 Jul 82 p 1

[Text]

**KHULNA, July 13:—** The DCMLA and Minister for Communications Rear Admiral M. A. Khan said here on Tuesday that government has taken up a dynamic programme for extension of telecommunication network to far-flung areas of the country to promote trade industry and commerce, reports BSS.

The DCMLA was addressing the workers of Bangladesh Cable Shilpa Ltd. on Tuesday morning. He asked them to maintain industrial peace and assured them that more production by the workers will help the factory in giving them further bonus from its profit.

He was happy to know that the company has already paid three bonuses to the factory workers from its profit.

The Minister exhorted the workers to maintain the tempo of production as the product of the factory would be required to meet the growing needs of cables for connecting the far flung areas including all the thanas within the network of telecommunication during the present fiscal year. He stressed the need for proper and effective telecommunication system to promote country's economy and to maintain link with the outside world.

The DCMLA assured the workers that a firm govern-

ment order for T. and T. will be given for full utilisation of the factory capacity. The government, he said, will also endeavour to have the products exported to the countries requiring our cables in greater quantities.

The workers assured the DCMLA of their total commitment for highest rate of production. They also welcomed various government measures for improving the lot of the labour force of the country.

Earlier the DCMLA went round various sections of the factory. He was happy to observe that maximum production was being maintained in the factory saving a large amount of foreign exchange for the country.

Bangladesh Cable Shilpa Ltd. established in 1971 is capable of producing about 3,30,000 conductor kilometre of different types of telecommunication cables per year.

The DCMLA also visited the Khulna GPO and Telephone Exchange. He directed the authorities concerned to complete the GPO building as soon as possible. He was told that Khulna Telephone Exchange had an excess capacity of 40 per cent. He asked the concerned officials to hold meeting of Telephone Allotment Committee immediately and allocate telephones to applicants.

CSO: 5500/7193

# UNIVERSITY PROFESSOR DEVELOPS INDIGENOUS MICROCOMPUTER

Dacca THE BANGLADESH OBSERVER in English 16 Jul 82 p 8

[Article by S. M. A. K. Mojahedy]

[Text]

Micro computer can be used extensively in Third World countries to increase efficiency and productivity in industries and other financial institutions. This mini-computer serving the desired purpose can successfully computerise the industrial production, traffic control, power supply, water plant, telephone exchange, banks and hospitals.

This mini-computer can now be designed and developed in Bangladesh by our own experts.

Dr Sved Mahbubur Rahman Assistant Professor of the Faculty of Electrical and Electronic Engineering of Bangladesh University of Engineering and Technology, has designed a new micro computer recently.

Dr Mahbubur Rahman while showing his micro-computer told this correspondent that his innovation will help computerise the industries, telephone exchanges hospitals etc. of our country. He said that the disadvantages of our industries like slow production rate, low quality of products, managerial inefficiency could be overcome if we use micro-computer in the industries. He said our engineers are equally talented compared to those of the developed countries and can even expertise in computerising any organisation thus reducing the dependence on foreign exchange and foreign experts.

Dr Rahman has proved

that a computer, the highest technology of the modern world, can also be designed and developed by our own experts. He said that five to seven times of the cost in foreign exchange could be saved if we computerise any organisation by our own experts. A computer will help an industry in boosting productions, increasing managerial efficiency and process control.

He urged the Government and industrialists to come forward in computerising the industries and other organisations with our own experts so that our products can compete in the international market.

Dr. Rahman and a lecturer of BUET, Khan Md Golam Kibria, are now jointly doing research work on designing of Bengali display and Bengali keyboard by which a computer can be communicated. It is reported that the research work will be completed very soon.

Incidentally Dr Mahbubur Rahman designed a universal micro-computer system for industrial automation while he was in Hungary which is now being used in a glass factory there.

It was learnt that a micro-computer if imported will cost Taka 2.5 lakh in foreign exchange, but if it is made locally, it will cost only Taka 30,000 in foreign exchange for material cost in addition to Taka 20,000 for craftsmanship.

## DELHI MEETING DISCUSSES INFORMATION FOR THIRD WORLD

New Delhi PATRIOT in English 17 Jul 82 p 10

[Text]

Union Information Minister Vasant Sathe on Friday cautioned the developing countries against 'information imperialism' which has replaced the political and economic colonialism.

Participating in a round table meet on the 'New international information order' in the Capital the Minister said the only way to liberate the peoples in the Third World was to exploit the audio-visual media and to set up a satellite for the Third World peoples alone.

He charged the US which controls 80 per cent of the flow of information of indulging in distortion and untruth in their dispatches on the Third World countries.

When the world was gradually freeing itself from the time old imperialism and colonialism there was imminent danger of information-slavery and the most vulnerable section of the people should keep their eyes open he added.

Cuban ambassador Jose Perez Nova stressed the need of equality and equity on the information front.

He said the developing countries in Asia Africa and Latin America which constitute 75 per cent of the world population have merely half of all the newspapers and one-fourth of their various editions.

He said the US controls 75 per cent of international TV flow 50 per cent of films shown in the world 70 per cent of the publishing houses in the world and its two news agencies transmit 8 million words a day in sharp contrast to those seven news agencies in the developing countries which transmit barely 50,000 words a day.

Press Council Chairman A N Grover criticised the European news agencies for their distorted and biased approach towards the developing countries.

He took strong exception to the BBC broadcast on the recent Falklands crisis which, he said was a "bundle of lies".

Press Institute director K Bhupal said it was not possible for the Western media to do justice to the developing countries as their correspondents hail from a different milieu and socio-economic background.

CSO: 5500/7187

## COMMITTEE GIVES GUIDELINES FOR RADIO, TV NEWS

Madras THE HINDU in English 14 Jul 82 p 7

[Text]

NEW DELHI, July 13.

The Parthasarathi committee, set up to examine the working of All India Radio and the television set-up, has suggested a professional approach to the presentation of news.

The guidelines, formulated by the committee, stress the need for balance and objectivity in the coverage of political controversies. As regards ministerial statements, it says the focus should be on information rather than on individuals.

The guidelines have been accepted by the Information and Broadcasting Ministry and circulated to media units.

The following are some of the suggestions of the committee:

There has to be a clear understanding of the difference between news and views. The reporting of news has to be factual, accurate and objective and only such views, as make news should find a place in news broadcasts. There can be no editorialising in broadcast news.

**News value:** Each news story should be judged strictly on the basis of its news value.

In the selection of news received from wide-ranging sources and in news editing, AIR and Doordarshan should be guided by the highest possible professional standards. While newsworthiness will determine the selection of news, its treatment and presentation should be directly related to the special characteristics and potential of each medium as well as the target audiences.

**No speculation:** The broadcast news should satisfy the highest criteria of accuracy and responsibility. AIR and Doordarshan cannot indulge in speculative stories of the type which appear in certain journals. They should develop their own sources for the verification of events.

In a developing country like ours, a special function of broadcasting should be the coverage of development, its significance, achievements and problems. Development news covers a wide range of activities — economic, technological, social and cultural. It should not be confined to mere statements and plans but explain their significance.

The style and method of news reporting

should reinforce the fundamental principles on which national policies are based. These fundamental principles include territorial integrity, national integration, secularism, maintenance of public order and upholding the dignity and prestige of Parliament, State Legislatures and the Judiciary.

**Focus on information:** Ministerial statements on policy matters, particularly those of the Prime Minister, are important in as much as they enable the people to understand national policies. Similarly, implementation of Government programmes should be given proper place in the news. The focus should be on information rather than on individuals. It is also necessary that views critical of official policies and the manner of their implementation should find adequate time.

**Balance needed:** In reporting on political controversies the broadcast media should be guided by objectivity and fair play. Due representation of differing viewpoints should be the aim. If a variety of viewpoints cannot be projected in the same bulletin, the balance should be achieved within a reasonable period of time.

In the choice of international events the objective should be to keep the people informed of world developments. A special effort should be made to give proper background of events. In the selection of news, greater attention should be given to events in developing countries, particularly our neighbours.

Apart from strictly pruning and editing the copy from the world agencies which have an overload of news from advanced countries and also a subtle bias, it would be desirable for AIR to use copy from the non-aligned news pool and other third world agencies on news merits. What is most essential is for AIR to increase the number of its foreign correspondents and carefully select their location and area of news coverage so that we can project a view of world developments as seen by India and other non-aligned and developing countries.

**National interest:** AIR and Doordarshan should aim at creating an informed public opinion on international events and developments. In preparing programmes in news and current

affairs, the national interest must be kept in mind. The national policy of peace and peaceful co-existence, non-alignment, friendship with all countries, support for people fighting for independence and freedom and the struggle against racism and racial discrimination and for an international order based on justice and equality should be highlighted. This does not exclude the reporting of any significant criticism of Government's foreign policy, either in its content or in its implementation.

Internal evaluation of news and current affairs programmes after their broadcast should be a regular exercise on a daily basis. A panel of outside experts for news and current affairs in a particular language should be considered.

**Choice of personnel:** The implementation of these policies and norms will depend upon the professional capacity of the people who run the news and current affairs programmes. The choice of personnel is most important. A professional must have had training in news work. He should be able to choose the items well and to rewrite the stories to suit the medium. Professional training and appreciation of the role of the media in a democratic society will give him the confidence to take the right decisions.

CSO: 5500/7185

## INSAT-1A CALLED SYMBOL OF INEFFICIENCY

Bombay THE TIMES OF INDIA in English 15 Jul 82 p 4

[Article by S. Kumar]

[Text]

INDIA'S first multi-purpose, operational satellite, INSAT-1A, is neither "A1" nor fully "operational", even after three months of its launch.

While idling its time away in space, INSAT-1A is fast turning into a symbol of commercial failure and an absence of modern management systems in the country.

Already, the life of the satellite has been drastically reduced to two-and-a-half years, from the projected seven years. When all the intended functions of the satellite are about to be carried out, the satellite itself would have run out of its life.

The only money-spinning part of the satellite is the telecommunication segment. While a promise of about 8,000 two-way voice channels was held out, at least half the number, if operational, would have sufficed. But, till today hardly 50 channels are operational. The post and telegraphs department hopes to increase the load on the satellite "gradually" and the process may run into several months.

The major earth station at Yevur near Bombay, has just begun to operate four channels of the INSAT against the earmarked 400 channels. Another 16 channels are likely to be put to use in the next few months.

The chairman of the space commission, Prof. S. Dhawan, while defending the Rs. 275-crore INSAT project, said that the satellite would earn its cost through the telecommunication segment in three years. But, in reality the effective operation of the satellite will not be three years. Also the post and telegraphs department has the capability to use only a portion of the available circuits.

Satellite communication will be economically viable only when the two places are separated by above 1,700 km. For distances shorter than this, the existing microwave and coaxial cable links have been found to be viable. Thus, satellite communication will be mainly useful in connecting the normally inaccessible areas.

Giving allowance to the genuine technical problems, the fact that the

country is ill-equipped to utilise a sophisticated satellite is a sad comment on the policy makers, planners and managers. No one seems to be bothered about the government's and the various department's complacency over such a project involving huge investment.

A communication expert attributed this to the total lack of "modern communication culture" in the society. To illustrate the point, the state-owned Hindustan Teleprinters, once convened a meeting of experts and it chose to inform the members about the meeting by post. The letter reached a member seven days after the meeting was over and it bore the stamp of many stations. It is appalling that Hindustan Teleprinters, a propagator of modern communication equipment, does not even possess the sense to use either the telephone or a telex for communication.

## RURAL TELECAST

The use of INSAT in telecasting programmes to the rural areas is in no better situation. As things stand today, the space department has offered to lend the INSAT for TV programmes for just two hours in the evenings every day. More time could not be spared because of some technical snags.

Even for telecasting programmes during the two hours, over selected areas, the departments concerned are not yet fully ready. Hectic co-ordination meetings are being convened to inaugurate the TV via INSAT by August 15. While the major metros of Bombay, Madras, Calcutta and Delhi may be able to get TV programmes on the national hook up, the rural areas depend on the expensive direct receiving sets, which are said to be on the production line.

The INSAT project seems to be proving that mere possession of a satellite does not mean much and the proof of its success lies in using it properly. Maybe, experts would try to justify the project as a forerunner to the future communication revolution. If INSAT-1A is termed an experiment, is it worth spending Rs. 275 crore on an experiment?

## TELECOMMUNICATIONS EXPANSION PLANNED FOR NORTHEAST

New Delhi PATRIOT in English 18 Jul 82 p 5

[Text]

Several steps have been taken by the Posts and Telegraphs Department for the development of telecommunication services in the North-Eastern region during the Sixth Five Year Plan, reports PTL.

These include automisation of manual exchanges at district headquarters, introduction of sophisticated technology in switching as well as in transmission fields and introduction of satellite communication facilities to cater to the needs of the remote areas.

A provision of Rs 75 crores has been made in the State's current five years Plan for this purpose, according to an official release in the Capital on Saturday.

It is also proposed to open three more telex exchanges at Jorhat, Kohima and Silchar for providing better telegraph facilities. The existing exchanges at Shillong, Gauhati and Tinsukia are also going to be expanded.

The total capacity to be added in the region is 190 lines.

It is also proposed to open 330 long distance post and equal number of telegraph offices for extending the telecommunication services in the interior, tribal and backward areas during the plan period.

For integrated telecommunication development, Mokokchang, Kohima, Tuensang and North Lakhimpur have been selected the release adds.

Provision of telephone connection practically on demand by 1985, provision of automatic telephone exchange at the district headquarters as far as possible opening of new telephone exchanges at all places having a registered demand of 10, irrespective of the cost, connecting of State Capitals to national trunk dialling network and provision of STD from district headquarters to their respective State Capitals are some of the other objectives of the Sixth Plan.

CSO: 5500/7188

## DOUBTS EXPRESSED ABOUT FRENCH PHONE TECHNOLOGY

Bombay THE TIMES OF INDIA in English 19 Jul 82 p 9

[Text]

NEW DELHI, July 18.

**W**ILL the sad story of the cross-bar exchange technology be repeated when India starts rolling out electronic digital telephone exchanges from its first factory in 1984?

The Union cabinet on Thursday approved the proposal for French collaboration for the manufacture of electronic exchanges but the choice of the French technology has been questioned by some technical experts.

The government found the French proposal attractive because it was fully backed by the French government which offered liberal financial terms. The French state-owned company, Cit Alcatel, was able to secure the "intention to proceed" document earlier even when the Union government had not completed the scrutiny of other offers.

Another point in favour of the French company was that its system had been in operation in France.

The company will, under the agreed terms, be obliged to demonstrate satisfactory performance of the equipment before starting its manufacture. It is expected to supply 200,000 lines for immediate installation. The first 500,000-line capacity unit is to be set up in Karnataka.

The critics of the French system

point out that it is only semi-digital and thus less economic and less suitable for diverse communications needs.

They point out that offers of fully digital systems were available to India and in one case, with matching financial terms from the government backing the supplier firm.

## OPERATIONAL EASE

It has also been stated that the level of software incorporated with some rival systems was higher which implied greater degree of operational ease. The French system, according to its critics, also requires specially cooled working environment. Some rival systems have functioned in a limited way in environments and traffic conditions similar to those in India.

One interesting proposal by a rival company included the offer of a factory and know-how for the manufacture of large-scale integration components. The chip manufacturing know-how is considered valuable from the strategic point of view also.

The critics of the French system have pointed out its design limitations, because of which it has low traffic handling capacity and is susceptible to traffic overload. The expected rise in traffic may lead to a deterioration on its performance, they say.

CSO: 5500/7190



## POSITIONING OF SATELLITES DISCUSSED IN RAJYA SABHA

New Delhi PATRIOT in English 20 Jul 82 p 5

[Text]

**RAJYA SABHA** members on Monday expressed concern at the positioning of American spy satellites over the Indian Ocean space zone and demanded that the Government do something about it.

The government expressed its inability to do anything about the spy space probes, but assured the House that in matters of communication satellites, it was mobilising the developing countries to ensure that western nations did not mobilise the entire geo-stationary orbital space just because they have been up there first.

The issue was raised by Dr Najma Heptullah who drew the Government's attention to the fact India was getting a raw deal in getting the most suitable place or 'slot' in space for its satellites because of the congestion up there.

Dr Heptullah also cautioned against increasing activity of the western spy probes. She recalled that when Indian marine scientists discovered poly-metallic nodules in the Indian Ocean the US manoeuvred one of its space probes to a position above the Indian Ocean to see what India was doing. This was a positive threat, Dr Heptullah said.

Minister of State for Communications Yogendra Makwana said the Government could not do anything about these space probes.

Communications Minister C M Stephen then assured members that India was busy mobilising the support of the developing nations to press for equitable distribution of the 'slots' in geo-stationary orbit and the radio frequency bands which are used for communication. The issue will be discussed at two international conferences scheduled to be held in 1985 and 1987. A spe-

cial cell had been set up in the Communications Ministry where specialists are preparing a strong case for India and the developing countries.

As Mr K C Pant (Ind), pleaded that both the communications and space departments try to have a 'futuristic' outlook in their policy approaches in this vital field, Mr Stephen again assured that India was keen to ensure that it did not suffer for its late entry into space.

Mr Stephen admitted that the best possible slot in the geo-stationary orbit at 36,000 km over the equator could not be procured for INSAT as Indonesia had already been given the allotment.

Referring to the problem of congestion of the geo-stationary orbit (GSO), Mr Stephen said it was considered by the World Administrative Radio Conference 1979 (WARC-79) convened by the International Telecommunication Union (ITU), the specialised agency concerned with this matter.

At WARC-79, on the initiative of India, in consultation with other countries, ITU decided to convene special world conferences in 1985 and 1987 to plan the use of GSO and the related radio frequency spectrum so as to ensure guaranteed and equitable access to these limited resources by all countries, he added.

He said India was also participating in the efforts of ITU to develop appropriate cost-effective techniques for more efficient use of these resources so as to reduce congestion.

## BRIEFS

DEVANAGARI KEYBOARD--The Communications Ministry has set up a committee to evolve a new key board for Devanagari electronic teleprinters to be manufactured by the Hindustan Teleprinters Limited, Madras, reports UNI. The specifications would provide for adaptation of the teleprinter to work with Roman as well as Devanagari scripts. This information was given in the Capital on Saturday by Communications Minister C M Stephen at a meeting of the Dak Tar Hindi Salahkar Samiti. Briefing the committee members on the measures taken by the department to propagate the use of Hindi, Mr Stephen said that five posts of senior Hindi officers had been sanctioned for the Hindi speaking States at Lucknow, Bhopal, Jaipur, Patna and Delhi. One post of Hindi officer for each office of the department had also been created and these would be filled up soon. Mr Stephen said that special information services in Hindi had been opened at Delhi, Patna, Lucknow, Jaipur and Bhopal telephone districts and would be opened in other cities soon. [New Delhi PATRIOT in English 18 Jul 82 p 5]

MICROPROCESSOR TECHNOLOGY--MADRAS, July 18 (UNI)--The country's telecommunication system will receive a boost when the microprocessor technology for speedy transmission of telegrams, now employed experimentally here, will be put into commercial operation on July 28. The "store and forward telegram system" (SFT), does away with manual re-transmission at intermediate offices, reducing the time by more than half. Mr. U.D.N. Rao, general manager of the Tamil Nadu Telecommunication Circle, said 14 telegraph offices had been linked to the system. Dr. Rao said that the SFT, a marvel of indigenous technology, would store messages in the "memory" received from different telegraph offices and after automatic analysis would re-transmit them to their destinations in accordance with the order of priority. The "memory" can retain 160 messages of 30 words each at any given time and transmit 120 messages an hour on each, he said. He said that messages could be transmitted non-stop whether the line was working or not. The system's automatic device to check any break or failure could indicate it by an alarm. The operator could then "dump" all the messages for that line into an external "memory" from which they could be called back and transmitted when the line was restored, he added. [Bombay THE TIMES OF INDIA in English 19 Jul 82 p 14]

INSAT-1A LIFESPAN--Bangalore, July 23 (PTI)--The life of India's multi-purpose communication satellite INSAT-1A would be curtailed from seven years to two and half years because of the firing of thrusters and the non-deployment of the jammed solar sail, according to Dr P.K.M. Bhat, manager INSAT-one master control facility at Hassan. Speaking at the institution of engineers here tonight, Dr Bhat said the thrusters which consumed more fuel were fired to correct the solar torque disturbance. Originally, this disturbance was to be controlled by wheels inside the satellite. Dr Bhat said the non-deployment of the jammed solar sail would also result in the curtailment of the time of television transmission. [Text] [New Delhi PATRIOT in English 24 Jul 82 p 4]

INSAT SOLAR SAIL--Ahmedabad, July 25 (PTI-UNI)--The ISRO Scientists will use some "violent" method at a later stage to open the solar sail of "INSAT" India's first operational communication satellite launched in April last, according to a spokesman of the Space Applications Centre (SAC) here. The non-opening of the solar sail was interfering with the balancing of the satellite which in turn would come in the way of operating the TV transponders for a long time, the spokesman told PTI here today. The space scientists were disinclined to tackle the solar sail problem immediately. They apprehended that any such attempt might create new problems in the spacecraft which was operational now. A drastic method to open up the solar sail would be tried after several of the planned INSAT utilisation programmes were carried out, the spokesman said. Meanwhile, a regional centre for INSAT data processing for resource evaluation and hazard prediction would be located in Bangalore, Union Minister of State for Steel and Mines Ram Dulari Sinha said on Saturday in Bangalore. She told newsmen that this would be one of the five centres to be set up in the country for utilisation of data from the INSAT satellites. Mrs Sinha, however, did not specify whether the INSAT-1A now in orbit or the INSAT-1B scheduled for launch early next year would be used for the purpose. She said the Bangalore centre would be managed by the Geological Survey of India and would be equipped with computer facilities for processing the data. [Text] [New Delhi PATRIOT in English 26 Jul 82 p 8]

INADEQUATE USE OF INSAT--Ahmedabad, July 24 (UNI)--Space Application Centre [word indistinct] Prof E.V. Chitnis here today regretted that the country had not done adequate preparations to utilise the potentialities of the first Indian national multi-purpose satellite INSAT. Delivering the keynote address at a seminar on INSAT utilisation organised here by the Gujarat Science Academy, Prof Chitnis said for want of planning the entire television transponder on board the INSAT was being under-utilised. He said though the country had sufficient know-how on using communication satellites for tele-casting educational programmes for the rural masses not a single direct reception system had so far been installed for this purpose. Prof Chitnis said considering the meagre preparation which had been done to utilise the TV segment of INSAT it was doubtful if the communication satellite would be able to fulfil its purpose. He said "what we need is economic and political

will without which we have nothing significant can be done for the betterment of the people." The Centre is preparing a feasibility report for using INSAT-1A for dissemination of news. Disclosing this, Dr K. Narayanan of the INSAT Utilisation Project said that various news agencies could directly distribute news to their newspaper subscribers through the satellite replacing the teleprinter lines leased from the Posts and Telegraphs Department. The experiment of publishing facsimile editions of "The Hindu" through the experimental communications satellite, APPLE, had been "very successful," he said. [Text] [New Delhi PATRIOT in English 25 Jul 82 p 5]

APPLE MOMENTUM WHEEL--Bangalore, July 20 (UNI)--Indian space scientists have successfully commissioned the indigenously developed momentum wheel for attitude control necessary to keep the vital C-band antenna of APPLE, the country's first experimental communication satellite, pointed towards earth. The attitude control of the satellite which was launched on 16 July last year by the Ariane launcher from the French Guianese space centre of Kourou, was hitherto being achieved by the momentum wheel, one of the many redundant systems aboard the APPLE. It will qualify for use in future domestic multipurpose communication satellites and help space scientists to model and plan the Indian remote sensing satellite in the latter half of this decade. [Text] [New Delhi PATRIOT in English 21 Jul 82 p 7]

CSO: 5500/7195

WOES OF PAKISTANI TELEPHONE USER DISCUSSED

Peshawar KHYBER MAIL in English 21 Jul 82 p 3

[Text] In various countries of the West, telephones are organised on a commercial basis. The company concerned installs them with pleasure as it means another client added to the list, meaning more income. If the clients have any complaints they are immediately looked into and removed to the satisfaction of the patrons. In our country the telephone department is a colossus which seems to have been set up to satisfy the egotism, greed and whims of the officials who are supposed to run it. At the outset, the installation of a new connection is the first great hurdle to cross. Applicants are kept hanging for years for a new connection, even after they have paid the requisite fee under a demand note issued to the more fortunate. The explanations are too "technical" for anyone to question them. We wonder why the Telephone Department does not pre-arrange all the potential needs and be ready to cater to the needs of clients at a moment's notice. We, however, suspect this to be a racket to invite corruption. Once installed, the subscriber is at the mercy of the Accounts Department. Over-billing has become a tradition. In answer to protests, the client is always proved wrong. It is stated that recording of calls is done by machine and the subsequent billing by computers. There is a lot of clear misstatement in this. It is true that machines do the recording of calls emanating from a particular number. But the linemen who can fix a call anywhere on the wires have the capacity to connect calls to any number. That is an underhand activity which it is difficult to catch. It is because of this that quite a large number of businessmen and others have standing arrangements with telephone personnel to keep their bills within an agreed minimum for which others have to pay through the nose.

Then every month, the readings on the recording machines are taken by operators or other petty officials which are then fed into a computer which only does the printing on the bills. This involves a lot of personal error and the use of a computer is completely a misnomer to mislead and befool the clients. In general, the accounts people refuse to entertain a revision of the bill on any grounds whatsoever. Then the telephone is cut without any notice to the subscriber. A man may be out of town or seriously sick or have a thousand other reasons for delays which must be taken into consideration. It appears the telephone is not an instrument of use but a luxury over which the department presides to indulge its own form of high-handedness and

blackmail. The commercial aspect of the undertaking between the department and the subscriber is hardly taken into consideration. There are official rackets going on under the very nose of the Government. We know of a person whose phone was disconnected when he had gone abroad. On return he did not take any measures to have it restored. There came to him an official who made a proposition, suggesting that he sue the postal department for not delivering a registered notice to be issued with a back date, and properly receipted by the postal authorities, fully in cahoots with the telephones. By arrangements between lawyers, damages would be realised and shared out three ways, the phones, the Postal Department and the subscriber. Our friend did not like the proposition and unceremoniously drove out the official who brought the proposition.

That was just an example. Now we come to facts concerning us. Our Rawalpindi correspondent has a telephone at his residence. Its bills began registering increasing figures each month in 1980-81. In December 1980 the bill was only Rs. 130, quite normal. But by August 1981 it reached the figure of Rs. 1860. The correspondent could not look after the bills as he was too much involved in the major operation and treatment of his wife. In December 1981 (26th), the phone was cut with a balance of Rs. 7,920. He approached the D.G. for instalments as well as a reconsideration of the bill. The latter was not even attended to; but the balance due was allowed to be paid in 10 instalments, starting February 23. The first bill for January 1982 showed 60 local calls while it was in a state of disconnection. A protest letter was ignored and has not been replied to till now. This certainly is not playing the ball, business way. Then last month, after four instalments of the arrear bill a normal monthly bill for April was issued without instalments being mentioned, though last date was June 29. But on June 23 the phone was disconnected. It was reconnected when the correspondent himself went to bring the matter to the notice of the accountants. But a fortnight later the phone was again cut. It is said the accountants of the Satellite Town office are angry at the request for instalments has been granted, and determined to harass the subscriber. The fact is simple. If instalments were not granted, the telephones would lose all its arrears. Being a journalist on limited income, if instalments were granted, he would retain the phone and the department would get its outstanding. But the Accounts Department, at a lower level, feels they have lost a lucrative "client," and are angry. This kind of harassment and other things have to be looked into.

CSO: 5500/5878

PEOPLE'S REPUBLIC OF CHINA

BRIEFS

XINJIANG KIRGIZ BROADCASTS--Beginning from 28 June, the Xinjiang broadcasting station will run a program in the Kirgiz language. This embodies the party policy on nationalities. The region has some 100,000 people of Kirgiz nationality, the majority of whom live in Kizilsu Kirgiz Autonomous Prefecture. The four counties in the autonomous prefecture have set up wired broadcasting stations and 37 communes in the autonomous prefecture have set up broadcast amplifying stations. All county broadcasting stations have run programs in the Kirgiz language to publicize the party's central work. [HK010233 Urumqi Xinjiang Regional Service in Mandarin 1300 GMT 25 Jun 82 HK]

CSO: 5500/4021

## PLANS FOR EXPANDING TELEVISION BROADCASTING

Tirana SHKENCA DHE JETA in Albanian No 2, Mar-Apr 82 pp 10-12

[Article by Agron Aranitasi and Vullnet Musaraj: "The Present and the Future of Our Television Technology"]

[Excerpts] The history of Albanian television began in 1959 when experimental television equipment was set up for the first time in an old building belonging to Radio Tirana. For several years, experimental work was carried out on limited and irregular schedules. The beginning of regular programs coincided with the broadcasting of the proceedings of the 6th Congress of the Albanian Workers Party in November 1971. From that time on, our television developed rapidly. Compared to 1971, the number of broadcasting hours has doubled and the range of broadcasts has been expanded considerably. In 1971, we had only one powerful station while today we have a whole network of powerful stations and many transmitters with capacities ranging from 0.5 watts to 1 kw of power, set on various points. Thus, most of the zones of the country are covered by television signal. The technical quality of the transmitters has been improved considerably and, in particular, their stability has been strengthened. Evidence of this is the fact that in 1980-1981, the television network had only 1-2 minutes of outages a month, compared to 20 minutes a month in 1975-1976.

The improvement of the stability and technical quality of the transmitters is connected with the raising of the scientific and technical level of the specialists and workers and the modernization of television technology.

Today, modern equipment which represents the very latest in television technology, is being used every day in television, along with equipment of a relatively old technology. For example, in Albanian television, for some years now, we have been filming in color, to a limited extent, using an advanced technological process and the results have been good. The television studios have been using electronic generators for special effects, an electronic writing or printing generator, constructed by means of the technology of digital diagrams, a number of generators with synchronized impulses and controls for blending pictures, constructed on the basis of the same technology, etc.



In particular, a good part of the equipment for recording pictures on magnetic tape, which is being done today with a magnetoscope, uses advanced technology. Our television uses the newest generation of magnetoscopes of the quadruplex family which are equipped with digital time correctors.

Now, our television transmits and records from various places, outside the television studios. For this purpose, permanent cable connections have been installed to many cultural, artistic and sports institutions in Tirana. Additional direct connections can be made with other points in Tirana by means of radio-relay equipment.

The successes in the quantitative and qualitative improvement of television technology and programs have been accompanied by the development of the production of television sets in Albania. Thus, 1971, which marks the beginning of regular television programming, was also the first year of the series production of television sets in the URT [Radio and Television Plant] in Durrës. Today, a great number of the television sets produced in Albania have integrated circuits and transistors, which ensure proper operation and highest quality. The great increase in production is an important indicator of the development of the television production industry. Compared to 1971, the number of television sets produced has increased 70 times; there is one television set for every 12 inhabitants.

The mountainous terrain of our country has posed and still poses the main problem in distributing the television signal all over the country. Therefore, during this five-year plan, several powerful transmitters will be constructed to cover those zones where the signal is weak and the reception is poor, while in the areas where there is no signal, a number of relay stations will be set up.

The introduction of color television will be an especially important success. Since there are differences in the transmitting of color broadcasts compared to black and white, most of the equipment (85 percent) will be different. Broadcasting in color poses other important problems, such as lighting, decor, etc. The entire lighting system in all the studios has to be changed. For example, in order to transmit the proceedings of the 8th party congress in color, the entire lighting system in the hall where the congress took place was changed.

In order to implement the recommendations of Comrade Enver in regard to the transmittal of color television broadcasts, a study was made by television specialists and it was decided that the transition would take place gradually, from year to year. According to this study, a large part of the changes will take place during 1982. This year, in addition to equipping some studios for color broadcasts it is essential that all common equipment which is known as central apparatus also be adapted for this purpose. The collection and broadcasting of all types of signals takes place in this apparatus.

At the present time, it is of utmost importance for television workers to learn how to operate the color television apparatuses which have been

installed recently. They were produced during the 1978-1980 period; they have a very advanced technology and require a very high level of knowledge. During 1982 there are plans to broadcast in color a good part of the news programs, the major programs for children, variety programs and a good part of the sports activities and of the cultural and artistic activities which take place outside the television studios.

Along with the development of the transmitting of programs in color we will progress to the production of the appropriate color television sets. Workers and specialists in the URT in Durres are working to put on the market the first lot of color television sets.

Our television successfully passed its first test with the broadcasting, in color, of the proceedings of the 8th party congress and some other events such as the 20th radio and television song festival and the New Year's concert. But this is only a good beginning.

CSO: 5500/3016

GOVERNMENT GIVES UNCONDITIONAL OK FOR ZBM TAKEOVER OF ZFB

Hamilton THE ROYAL GAZETTE in English 10 Jul 82 pp 1, 2

[Text]

Bermuda Broadcasting Company has been given the unconditional Government consent it was seeking for the planned takeover of ZFB.

At their annual meeting yesterday, Bermuda Broadcasting, which runs ZBM, received confirmation that the merger would not affect licences for the two television stations "in any way", Senator the Hon. Quinton Edness, managing director of ZBM said last night.

The approval, given by the Hon. Sir John Sharpe, Minister of Home Affairs, gives Bermuda Broadcasting a free hand in the running of the joint businesses and clears the path for the final transfer of ZFB shares.

"However, the Minister did note that he intends to have a complete review of the entire telecommunications area," said Senator Edness.

Some 97 percent of ZFB shares have been tendered to ZBM since the \$470,000 takeover was announced in March. But ZBM's offer to buy shares in return for cash and shares in Bermuda Broadcasting remained conditional pending final Government consent and clarification over restrictions on the licences.

Said Bermuda Broadcasting president Mr. Martin Smith: "The directors have today made the offer unconditional which means that the transfer of all the shares tendered will now go through."

Mr. Smith said there were now only 4,000 shares which had not been tendered and Bermuda Broadcasting was now trying to track down the few shareholders who have not come forward, some of whom appear to have left the Island.

The owners of 70 percent of the shares, including Gibbons Company, had already agreed with the deal when the merger was announced and since then B.B.C. have been seeking to buy the remaining 30 percent.

Mr. Smith also revealed yesterday that the company's profits for 1981 dipped by some \$200,000 from the previous year. According to the B.B.C. annual report net income for 1981 was \$454,000 compared to \$665,000 in 1980.

"Our company in 1981 shared with most businesses the difficulties arising from the April disturbances in Bermuda and a deepening international recession," he said in his president's report.

"The results for the year are disappointing when compared with the previous year." He said the profit drop had been caused by running expense increases which had outweighed a slight rise in revenue.

GOVERNMENT APPROVES NEW TELECOMMUNICATIONS LAW

Santiago EL MERCURIO in Spanish 20 Jul 82 p C-1

[Text] Yesterday, during an extraordinary session, the Government Junta approved the draft of a new General Telecommunications Law. The bill was submitted to the Legislative Branch in April 1980. The law contains 35 articles and 5 provisional articles grouped under five headings: General Provisions, Concessions and Services, Exploitation and Operation of Services and Violations and Penalties.

The law begins with a definition: "Telecommunications is understood to mean all transmissions, emissions or receptions of signs, signals, written material, images, sounds and data of any kind by wire, radioelectricity, optical media or others."

The law goes on to say: "All inhabitants of the republic will have free and equal access to telecommunications and any person can avail himself of the concessions and licenses established by the law, unless specifically excepted thereby."

The law classifies telecommunications services in four categories:

a. Free-reception telecommunications services, whose transmissions are destined for the free and direct reception of the public in general. These services include audio, video and other kinds of emissions. b. Public services and telecommunications destined to satisfy the needs for telecommunications of the community in general. These services are designed to interconnect with other public service telecommunications. c. Limited telecommunications services whose purpose is to satisfy specific needs of designated enterprises, organizations or persons previously agreed to by them. These services can cover the same kinds of emissions as those mentioned in category a. of this article and the provisions of these services does not permit access to traffic from or to subscribers of the public telecommunications networks. d. Services for amateur radio operators, whose purpose is radio intercommunication and technical and scientific experimentation on a personal, nonprofit basis.

The law goes on to say that the installation, operation and exploitation of telecommunication services located in national territory, including the territorial waters and air lanes, will be governed by the standards embodied

in this law and by the provisions of the international telecommunications agreement in Chile. The law is also applicable to installation systems which use electromagnetic waves for purposes other than telecommunications.

The law provides, however: "The provisions of the preceding paragraphs are not applicable to free-reception television, which will be subject to the provisions of special laws which authorize it, without detriment to the technical standards established by the law; and, without detriment to the interpretative rules embodied in the Civil Code, the meaning of the terms used in this law which are not defined therein shall preferentially be that which is assigned to it by the country's international agreements on telecommunications."

The law provides that the Ministry of Transportation and Telecommunications, through the Undersecretariat for Telecommunications, is responsible for the application and control of this law and its regulations. The law adds that the Undersecretariat will be exclusively responsible for the technical and administrative interpretation of the legal and regulatory provisions governing telecommunications.

This notwithstanding, the law states that control of all or part of telecommunications during this constitutional hiatus will be the responsibility of the Ministry of National Defense, as established in the pertinent legislation.

#### Concessions and Licenses

"Free-reception or radiobroadcasting telecommunications services, public telecommunications services and services limited to television will require concessions granted by Supreme Decree before they can be installed, operated and exploited. Concessions will also be required for installations of any kind destined for the intermediate service necessary to the providing of the services mentioned in various preceding paragraphs," the law stipulates.

It goes on to say: "Concessions will be for an indefinite period, with the exception of radiobroadcasting concessions which will be valid for a period of 15 years, unless the interested party requests a shorter period."

The law adds: "Limited telecommunications services and those of amateur radio operators will require licenses issued by the Undersecretariat of Telecommunications before they can be installed, operated and exploited."

"Licenses will be for a period not to exceed 5 years and will be renewable for equal periods. Limited services operating within the confines of an installation will not require concessions or licenses," the law says.

"Telecommunications for the institutional use of the Armed Forces, Carabineros of Chile, Investigations and the National Information Center will not require concessions or licenses and will not be subject to the expiration provisions."

The law also says: "The granting of concessions and licenses will not be subject to restrictions and limitations with respect to quantity and equipment and kinds of service and/or their geographic location; and more than one concession or license can exist in the same geographic area."

The granting of telecommunications concessions and licenses should have the prior written authorization of the Ministry of National Defense which will be issued by the Armed Forces Telecommunications Committee.

Concessions for radiobroadcasting telecommunications services and services limited to television will in addition need the written authorization of the National Radio and Television Council.

"Concessions for free-reception radiobroadcasting services and limited television services will be granted to natural persons, Chileans, over 21 years of age, and to public or private corporations established in conformity with the laws of the country and with residence in Chile. With regard to partnerships, the partners must be Chileans. As for corporations and stock companies, their president, directors and manager and administrators must be Chileans. The administrators and representatives of associations and foundations must also be Chileans. The addition of new partners or members to partnerships, associations and foundations and the subscription and transfer of corporations and stock companies must have the prior authorization of the Undersecretariat of Telecommunications," the law stipulates.

#### Rates

"The prices or rates for public telecommunications services within the national territory and those extending abroad will be freely determined between the providers of the service and the users. This provision will also be applicable to the intermediate services for which contracts are reached by the parties involved in such services. If the regulatory conditions in the market are insufficient to ensure a system of free competition, or monopoly situations or other distortions of a similar nature arise, the Ministries of Transportation, Telecommunications and Economy, Development and Reconstruction will have the authority to establish such a system."

Further on the law states that public telecommunications services are authorized to install their own systems or to use those of other companies consistent with the concessions granted to them. All professional parties providing public international services will have access to the use of satellite systems under conditions of equality in the technical and economic sectors, in accordance with the terms of the concession and the agreements between the parties.

Finally, the law states: "Current telecommunications regulations will remain in force provided they are not incompatible with the present law until such time as this law's regulations are issued."

Current concessions will continue in accordance with the time frames agreed to when they were granted.

"As for the action of the National Radio and Television Council and until the organic law becomes effective, the functions which Article 17 of the present law confers upon this entity in relation to TV will be exercised by the National Television Council."

8143

CS0: 5500/2312

## GRENADA

### BRIEFS

SATELLITE GROUND STATION--St Georges, 6 Aug (AFP)--Grenada will install a satellite groundstation to receive Soviet radio and television programs. This topic was discussed during Grenadian Prime Minister Maurice Bishop's recent visit to Moscow, Radio Free Grenada reported. The Grenadian prime minister said that "This will make it possible to break imperialism's cultural yoke on Grenada" and to receive news "from progressive and socialist programs different from the garbage from the United States that we must now watch." Meanwhile, the Grenadian radio station noted that the Soviet Union has donated steel equipment and farming material valued at \$4 million and that it signed an agreement to purchase cacao, nutmeg and bananas from Grenada at fixed prices over a 5-year period. These trade agreements with the USSR will permit Grenada to diversify its trade relations and to develop new markets, Bishop said. During his trip to Moscow, Bishop also obtained a line of credit for \$7.5 million, payable in 10 years at an interest rate of 3 percent and with a grace period of 3 years. This credit will permit the construction of the satellite groundstation and will help to finance studies on the possible construction of a port on the island's eastern coast. [Text] [PA091826 Paris AFP in Spanish 0240 GMT 7 Aug 82]

CSO: 5500/2319



## BRIEFS

JAMINTEL DEVELOPMENT--Contract for a two-floor vertical extension to the Jamintel Centre, North Street, Kingston which will cost \$1.2 million was signed yesterday. The extension will cost \$887,000 and will be used to accommodate a new international telephone exchange and provide additional office accommodation. The total cost will be \$1.2 million. The project is the third phase of the company's capital development programme. The first phase involved modifications to the Prospect Pen Earth Station in St Thomas, including the construction of two new antennae and a control building which is almost complete. The second phase involving the installation of the TASI (Time Assignment Speech Interpolation) equipment to increase the capacity of the Jamaica-Florida submarine cable, is in progress. The programme which will continue into 1987 will cost \$70 million, including U.S. \$31 million in foreign exchange. The contracts were signed yesterday by Mr Trevor G. Mignott, General Manager of the company and Mr Selvin Wallace of the contractors, McGregor and Levy Limited. In attendance was the Minister of Public Utilities, the Hon Pearnel Charles. The construction programme is expected to begin in August. [Text] [Kingston THE DAILY GLEANER in English 2 Jul 82 p 1]

CSO: 5500/7552

## NATIONWIDE TELECOMMUNICATIONS NETWORK PUT INTO SERVICE

Djibouti LA NATION DE DJIBOUTI in French 10 Jun 82 p 5

[Text] With the opening of the nationwide telecommunications network, the distance barrier separating Ali-Sabieh and Obock is broken. The official unveiling ceremony: At this moment, the prime minister called the commissioners of the interior districts one by one.

On Saturday, 5 June, prime minister Mr Barkat Gourad Hamadou officially put into service the national microwave telecommunications network which will from now on automatically link the four major cities of the interior districts by telephone, not only to the capital, but also to each other and to countries abroad.

This achievement, which constitutes an important step in the evolution of telecommunications in the Republic of Djibouti, follows the opening of a ground station last year, and most recently, the establishment of new automatic telephone links with Ethiopia at the beginning of this year.

### "An Arduous Task And An Important Investment"

Briefly describing the efforts made to achieve this project, Mr Youssouf Ali Chirdon, director of the Post and Telecommunications Office, said that this operation required first of all "the furnishing and putting into place of the microwave links themselves with the necessary telephonic instruments, carried out by the French Telecommunications Company (SAT) thanks to financing by the Kingdom of Saudi Arabia in the amount of 120 million Djibouti francs."

"The second part of the project consisted of putting into place the essential supports and in particular necessitated constructing five towers, certain of which were in areas with extremely difficult access, three constantly air-conditioned buildings sheltering delicate material, and finally 6 km of electrical lines in a region inaccessible to vehicles." "I will note in passing," declared Youssouf, "the construction of the Ambokto tower near Ali-Sabieh, for which 20 tons of concrete and several tons of material had to be brought by helicopter to the base of the worksite, on a high mountain of the region."

The director added that "The financing of this second part of the project, in the amount of 80 million Djibouti francs, was carried out by the Post and Telecommunications Office."

Today 30 telephone lines link each district, and in less than two months this capacity will be doubled.

Thus, a great gap has been filled because, as Chirdon emphasized at the time, if it were necessary and essential, considering our type of economy, to facilitate and increase our country's relations with the outside world, it was equally important to develop the domestic network and to bring to the people of the Ali-Sabieh, Dikkil, Obock and Tadjourah districts the same telephonic facilities enjoyed by the capital's inhabitants. There is no doubt that this new instrument, which breaks the distance barrier between people, will contribute enormously in bringing together the men and women of this country, while at the same time easing the struggle for economic and social development which we have just begun.

9939

CSO: 5500/5834

UNITED ARAB EMIRATES

BRIEFS

INTELSAT MEMBERSHIP--Abu Dhabi, 26 Jul (UNI)--The United Arab Emirates (UAE) has become the 42nd member of the International Marine Satellite Organisation (INTELSAT), it has been announced here. INTELSAT works to improve maritime communications through satellites. It also seeks to promote the peaceful use of space communications. The UAE recently enacted a commercial maritime law to foster the country's maritime fleet. The law requires all UAE vessels to fly the flag of the country. [Text] [GF311237 Kuwait ARAB TIMES in English 30 Jul 82]

CSO: 5500/4733

ANGOLA

BRIEFS

NO PHONES TO PORTUGAL--In a note to our newspaper, the ENATEL [National Telecommunications Company] has informed telephone subscribers that telephone connections to Portugal are seriously affected. The ENATEL added that since the breakdown has occurred outside the country it is not possible to estimate the delay in repairs. [Text] [Luanda JORNAL DE ANGOLA in Portuguese 22 Jul 82 p 2]

CSO: 5500/5880

## BRIEFS

FORTHCOMING NEW RADIO CHANNEL--The government will soon introduce a new local radio channel in the broadcasting service. Mr Ato Austin, Secretary for Information, announced during a visit to a transmission station at Ejura that the new station would broadcast advertisements in local languages and also enable illiterate population to keep abreast of the current affairs of the revolution. [Text] [London WEST AFRICA in English No 3390, 26 Jul 82 p 1962]

DIRECT INTERNATIONAL CALLS--Direct international telephone calls on a trial basis have begun in Accra. If the trial proves successful, the system will ease the congestions often experienced at the P&T External. According to an official of the Post and Telecommunications Corporation, full operations would start this week. [Excerpt] [London WEST AFRICA in English No 3390, 26 Jul 82 p 1964]

CSO: 5500/5879

ESTABLISHMENT TELEVISION AUTHORITY CONTROL BOARD PRAISED

Mbabane THE SWAZI OBSERVER in English 10 Jul 82 p 4

[Editorial: "Good News"]

[Text]

THE recent publication in the Government Gazette of the Swaziland Television Authority Bill which will establish a Board of Control to monitor the content of programmes and other transmissions has brought some good news.

If the Bill goes through parliament, as we hope it will, the appointment of the five-member board of control will be speeded up. We say this because one of the duties of the Board is to ensure that the content of the programmes conform with "accepted moral standards".

In the past, we have watched programmes that could rightly be considered detrimental to Swazi children and culture. With the establishment of the Board we hope such programmes will be censored. For an example, kissing in public clashes with our culture, particularly for children.

Although it is not clear in the published Bill what is meant by "other transmissions", we hope that the Board's duties will also include the censoring of films shown in local cinemas.

The composition of the Board as to who should be on it is also of great importance as there should be no clashes of cultures and taste.

The Board will also be responsible for erecting TV stations in the kingdom. But before engaging in this, we hope the Board will make NTBS screen as much local programmes as possible, including films from other countries in Africa.

This would necessitate the establishment of communal TV centres in rural areas where people who can't afford to rent TV sets could watch events of national importance. This is done in other developing countries.

We hope that one of the first duties of the Board would be to control TV rentals which are very high. We believe that there should be more advertising on TV than now if a campaign was launched. As it is now, money is lost on time spent playing interludes instead of having advertisements.

We also hope that the Board will encourage both formal and informal educational TV programmes and discussions on topical subjects of national interest.

TV programmes should be geared to suit both literate and illiterate Swazis.

## SWAZILAND

### BRIEFS

EARTH SATELLITE STATION--A report from Mbabane says building is expected to begin soon on a \$4 million satellite earth station in Swaziland to bring telecommunication services to international level and to reduce dependence on South Africa. The station will also enable Swaziland to receive live television transmissions from Europe and the United States. The Export Corporation in Canada has provided \$3 million for the project which should be in operation by June next year. Swaziland has also signed an agreement with the Canadian Government for a grant of about \$900,000 to send technicians, engineers and accountants to Canada for training in satellite communications. [Text] [Johannesburg International Service in English 0630 GMT 29 Jul 82 LD]

CSO: 5500/5883



## BRIEFS

RADIO, TV LICENSE FEES--RADIO and television licences rose 60 percent under regulations gazetted yesterday. A radio licence goes up from \$5 to \$8, while a television licence now costs \$32 instead of \$20. Both increases have been approved by the Minister of Information, Posts and Telecommunications, Dr Nathan Shamuyarira. On April 2 this year, radio licences were raised to \$7, and \$28 for television, but both increases were cancelled a week later. The director-general of the Zimbabwe Broadcasting Corporation, Cde Tirivafi Kangai, would not comment on the increases yesterday, but said a statement would be released soon. [Text] [Harare THE HERALD in English 17 Jul 82 p 1]

CSO: 5500/5872

CANADA

QUEBEC, FRANCE AGREE ON EXCHANGES OF TV PROGRAMS

Montreal LE DEVOIR in French 17 Jun 82 p 6

[Article by Rodolphe Morissette]

[Text] Starting on 1 January 1983, for a 3-year period Quebec will sell to the three French television channels 100 hours of Quebec programming each year. At the same time, channel TVFQ-99 will broadcast 2,500 hours of French television in Quebec.

The contract between the Quebec ministry of intergovernmental affairs and the Quai-d'Orsay covering the period from 1979 to 1982 is about to expire. It called for the unilateral broadcasting of 2,500 hours of French television on TVFQ, to be handled through a consortium of cable distributors in Quebec named the SETTE [Editing and Recoding Company, Ltd]. In the beginning the Quebec government's negotiators wanted the contract to be renewed from 1982 through 1985 to contain a reciprocity clause, with Quebec to sell to France 500 hours of Quebec television or films each year. They finally settled on 100 hours at commercial rates. According to the ministry of intergovernmental affairs, this will mean earnings of about \$600,000 for Quebec each year.

This jump to exports of 100 hours a year is enormous, when we realize that in 3 years (from 1977 to 1979), Radio Canada, the ONF [National Film Office], Radio Quebec, and TVA [expansion unknown], all together, managed to sell to the three big French television channels a grand total of 22 hours, with 12 hours provided by Radio Canada, and eight by the ONF.

The agreement in principle on the new 3-year contract between Quebec and the Quai-d'Orsay was approved at the end of April by the two prime ministers during Pierre Maurois's trip to Quebec. It is part of the general cooperation agreement (amounting to \$10 million) between France and Quebec. Now the administrative details of the contract with TVFQ are being worked out.

About a month ago, a Mr Braband, a French citizen representing the three French television channels, came here to see if he could find any film and television material worth sending to France. He apparently did find some of interest, but raised the possibility that some Quebec productions might have to be dubbed (into French) to be understood in France.

The annual joint Quebec/Quai-d'Orsay budget for the exchange of television programming will be about \$2 million for each of the next 3 years. The budget includes three major categories of expenses. The largest is the payment of royalties to authors (primarily French). For this item the two governments will pay together (in equal shares) \$1.5 million in 1983, \$1.75 million the following year, and \$2.10 million in 1985, or an average of about \$600 to \$840 per hour.

The two governments will also share technical expenses paid in France for the recording and retaping of programs being sent to Quebec. In 1982, this cost each of the two governments \$195,000; in the new 3-year contract, this amount will be indexed to the cost of living (+ 14 percent in France this year), with an adjustment because of the devaluation of the franc.

Then the Quebec ministry of communications will pay about \$100,000 a year for the purchase of recording reels, for customs duties on the French material arriving on weekly Air France flights, and for the transport of this material from the Mirabel airport to the SETTE facilities in Brossard. Quebec is now trying to reach an understanding with the Quebec cable distributors who will use these reels, so that the cable distributors would pay an increasing portion of the costs over the next 3 years (first 10 percent, then 30 percent, and finally 60 percent).

Once at Brossard, the French reels will be recoded for our broadcasting system, then will be transmitted by satellite to the Quebec cable distributors, who will then retransmit the French programs to Quebec households which have cable. The SETTE will pay for this part of the operation, but the Canadian Broadcasting and Telecommunications Council has authorized the cable distributors to charge a monthly fee, varying according to the region, to the 850,000 cable subscribers who can receive TVFQ. (It costs 25 cents a month for subscribers in the Montreal region).

The Quebec government negotiators are trying to get the three French television channels to pay more attention to the distribution, as stipulated in the contract, of the major categories

of television programming (youth shows, documentaries, drama, variety shows, sports and news/talk shows). It is felt in Quebec that the three French channels have some trouble in exporting 2,500 hours suitable for Quebec television, which means that they resort to padding, using short fillers taken from the files of the National French Audiovisual Institute.

A poll done by the CEGEM [expansion unknown] which specializes in public affairs and publicity, last year showed that 48 per cent of the potential audience of TVFQ, approximately 350,000 households, watched the channel for several hours each week. The head of the SETTE, Mr Rejean Myre, told LE DEVOIR that recent Nielsen reports indicate that the TVFQ broadcasts are most popular during the daytime, then on weekends. The TVFQ broadcasts (50 hours a week) are shown in the evening from 1700 to 2430, and then repeated on the same day the following week from 0930 to 1700 hours.

According to Mr Myre, the French broadcasts are most popular in the Quebec region, and then in the area of Lac-Saint-Jean. The Quebec government insisted on negotiating such an exchange with France in order to help to balance the American broadcasts which are quite popular in French-speaking households in Quebec.

7679

CSO: 5500/2301

AGENCY DEFIES MINISTRY; CABLE TV TESTS TO CONTINUE

Helsinki HUFVUDSTADSBLADET in Swedish 13 Jun 82 p 22

[Text] For the time being at least, the Posts and Telecommunications Board does not intend to heed the request from the Ministry of Communications that it discontinue test transmissions of satellite TV programs. The agency has sent the ministry a letter in which it stresses the importance of the tests. The Posts and Telecommunications Board points out that it is important that the cooperation with Helsinki TV continue and that the test transmissions also be started in Rovaniemi.

A couple of months ago, the Ministry of Communications sent the Posts and Telecommunications Board a letter in which it complained that government funds were being used for experiments with the reception of TV programs via the OTS satellite. The ministry urged the Posts and Telecommunications Board to promptly discontinue its cooperation in the project.

Claim for Damages

In its response, the Posts and Telecommunications Board says that the Ministry of Communications got involved in the matter too late. The Posts and Telecommunications Board decided to join in the experiment back in January, and activity began in March. Helsinki TV has also announced that if the Posts and Telecommunications Board discontinues its participation in the experiment, the agency can expect a claim for damages and possibly a lawsuit.

The Posts and Telecommunications Board emphasizes that when the two parties drew up the contract, it was agreed that the experiment would continue as long as the OTS satellite was available. It also points out that TV viewers would react negatively if the transmission of programs were suddenly halted.

According to the Posts and Telecommunications Board, the receiving equipment that has already been installed in Rovaniemi provides good results for comparison with the experiment in Helsinki. Satellite TV transmissions over the Rovaniemi cable system would also provide a positive picture of government activity.

The Ministry of Communications refers in its letter to the fact that a law on cable television is currently being drafted. The ministry feels that it is not

reasonable to use government money to start new forms of cable television activity while the law is still being drafted.

#### Posts and Telecommunications Board Should Be Active

The Posts and Telecommunications Board answers that no basically new form of cable television activity is involved. Nor is the experiment establishing any lasting basis for permanent arrangements or legislative work. The Posts and Telecommunications Board also points out that if it does not take an active part in the arrangements for transmitting satellite programs, someone else will.

The Posts and Telecommunications Board refers in its letter to cable television's economic and technical advantages in comparison with a community antenna on each building. It says that television satellites increase the need to establish local government-owned broadcasting networks. The satellites also provide opportunities for marketing those systems.

11798

CSO: 5500/2288

TURKU GETS COUNTRY'S FIRST OPTIC-FIBER PHONE CABLE

Helsinki HUFVUDSTADSBLADET in Swedish 12 Jun 82 p 4

[Text] Turku--On Tuesday the Turku municipal telephone company became the first in Finland to begin using an optic-fiber cable system for transmitting telephone calls. It involves a 5.3-kilometer-long optic-fiber cable between the central telephone exchange and the Paaskyvuori subsidiary exchange, and the exceptional feature, compared to a normal connection, is that the new 34 Mbit/s system operates as a transmitter of light beams using a laser so powerful that no repeaters are needed on the line.

In a normal cable, repeaters are required every 1.7 kilometers on the average. The new transmission system's capacity is 480 voice channels, of which 30 are currently in use. More connections will come into use this fall with new technology.

As a matter of fact, it can be said straight out that as usual, the cooperation between L.M. Ericsson and the Turku Telephone Administration means new achievements in our country, and Veikko K. Tahti, telephone chief in Turku, has told HUFVUDSTADSBLADET that in no way does it look like that cooperation is going to stop.

He also pointed out that Turku's telephone company intends to use the new technology with optical fibers when it expands its system. In reality, our country's basic telephone network is already relatively well developed, but a few gaps are naturally going to appear.

Optic-fiber cables are coming on very strong, and L.M. Ericsson expects their use to increase 100-fold over the next few years. Engineer Nils-Goran Engblom of Stockholm emphasizes that today there are even experts who say that it will soon be possible to lay such cables across the Atlantic. For the time being, optic-fiber cables--the one in Turku was delivered by Nokia, incidentally--are not exactly competitive, but they are in fact on the borderline.

L.M. Ericsson has delivered similar equipment to the Scandinavian countries and to Italy, Saudi Arabia, and Mexico, among others. With this new development, the firm and the Turku telephone company are again making history in the development of telecommunications in Finland: in 1978, an AXE digital exchange system went into operation in Turku, and it was the first in the world.

11798

CSO: 5500/2288

FRANCE

PTT RECEIVES PRIVATE FINANCING TO MAKE UP FOR LOST FUNDS

Paris LES ECHOS in French 2 Jun 82 p 6

[Article by Jacques Jublin: "Private Financing Companies to the Rescue of PTT"]

[Text] Louis Mexandeau can thank Robert Galley. When, toward the end of the 1970's, the former minister of PTT had the felicitous idea of creating private telecommunications financing companies to offset shortfalls in state funding of the PTT, little did he imagine he would one day be thus rendering yeoman's service to a socialist government. For, the PTT, recently relieved of some 2 billion francs by the Treasury because the state is short of funds (LES ECHOS of 25 May), has struck it rich. FINEXTEL [Financing Company for the expansion of Telecommunications], CODETEL [Company for the Development of Telecommunications], CREDITEL [Telecommunications Leasing Company], AGRITEL [expansion unknown], etc, will play the role of budgetary "refloaters."

Louis Mexandeau's ministry is prepared to authorize them to bring 3.3 billion francs of new capital into domestic telecommunications, while their intervention can actually be limited to 2 billion francs. A curious bit of high arithmetic: On the one hand, the state milks its PTT, which it perceives as a "cave of Ali Baba," of the latter's 6 billion francs of profits while that public service, on the other hand, turns to the private sector for the financing of its expenses.

The economy has its by-roads that will enable the PTT to not fall too short of its investment goals. The conclusion is there to be drawn! Initially, 27.2 billion francs were provided in the 1982 budget for the network, to connect more subscribers to it and to improve the quality of its services. Jacques Delors and Laurent Fabius having some time ago decided to relieve the postal service of 600 million francs and the telecommunications services of 1.5 billion francs in an effort to economize, the minister of PTT could no longer count on more than 25.5 billion francs. A gaping "hole" that could handicap economic recovery. And a serious threat to employment in certain regions, the western region to begin with.

A paradox at the very least and at the very moment when the government was asserting incessantly that the economy's resurgence had to be fueled by the investment-intensive high-technology industries, such as electronics, telecommunications and data processing.



And the solution it has brought forth is as clever as it is unorthodox. With the 3,3 billion francs of fresh capital to be provided by the private financing companies, the PTT will be in a position to spend 27 billion francs to install new lines and modernize equipment throughout the Hexagon. Its "net loss" will thus be, from a funding standpoint, only 200 million francs, which may even be absorbed through an increase in productivity. Currently, the PTT is advancing at an annual growth rate of 5 percent: Its "in-house" reserves should enable it to go beyond this.

This would be a good way to unburden the telecommunications enterprises of the unemployment problem, which has them concerned. They have not failed to express this concern, which they did yesterday, through the spokesmen for their employees' union, SI 3 T, to Mr Louis Mexandeau.

The minister lent an understanding ear, saying: "It is necessary that we make known together and constantly the use that is being made of the public's money and how the PTT's investments are contributing positively to the government's policy as a whole." In a way, the state is appealing to the state for understanding, in that, the Ministry is an administrative agency, and the industrial firms it administers are public enterprises.

While the 1983 budgetary verdict is not yet known, the 1982 budget has been rescued thanks to the private sector. And without inflation, since the Audit Office itself has issued an opinion that the capital to be brought in by these companies would not cost any more than a new bond issue. The government will no longer be able to dig into these funds to plug up gaps elsewhere.

The PTT has warned: Telecommunications services will require annual investment rate of 27 billion francs a year over the next 5 years at least. For, subscribers are demanding more and more telecommunications network facilities; even those households already equipped with telephone service frequently want a second line. By 1986, 95 percent of all households are certain to be connected to the network, but then the phase of equipment renewal and of supplementary equipment will open up. This is borne out by all economic models.

9238  
CSO 5500/2283

## FRANCE

### BRIEFS

FOURTH TV STATION IN 1983--The fourth TV station is to begin its transmissions in 1983 with the conversion of the present 819-line frequency (the first black and white station) to the 625-line standard. This conversion will involve some 40 transmitters and some 100 relay stations. Its object is to be able to serve 70 percent of the population between now and 5 years hence, particularly all cities of over 50,000 inhabitants. This information has been released by the minister of PTT, Mr Louis Mexandeau. Georges Fillioud, for his part, made a point of emphasizing yesterday to the Senate that the viewers with TV sets that operate only on 819 lines will be indemnified by the government inasmuch as they will be deprived of TV service by this conversion. According to government figures there are no more than 30,000 sets of this type throughout the Hexagon. The government's decision puts an end to a major controversy, in that, for some years now, some have advocated using the 819-line standard for a fourth private station. What will the nature of the new state station be? Cultural and educational. Georges Fillioud does not exclude the possibility that a portion of its program time will be allocated to public or private publishers, or even a mixture of them. Free or paid, the fee will be one of the major topics for discussion by the Interministerial Committee, which is to meet on Monday to take up the dossier of the fourth TV station in depth. [Text] [Paris LES ECHOS in French 11 Jun 82 p 4] 9238

THOMSON-CSF IN SAUDI ARABIA--By decision taken at a big international meeting, Thomson-CSF has been selected to build the MEDARABTEL [expansion unknown] microwave network that is to provide telephone, television and telex facilities linking Saudi Arabia, the Yemen Arab Republic, the People's Democratic Republic of Yemen, the Republic of Djibouti, and Somalia. The project, the cost of which will total (U.S.) \$18 million, is being financed by the FADES [Arab Economic and Social Development Fund]. The MEDARABTEL network will be built by Thomson-CSF under a turn-key contract, with the participation of the Italian Telettra firm. The new Thomson-CSF microwave equipment (960 telephone channels plus 1 TV channel) will be powered by solar energy at many of its stations. Thomson-CSF will also participate in the training of the network's operating personnel. [Text] [Paris LES ECHOS in French 7 Jun 82 p 6] 9238

BROADCASTING STATION IN CARIBBEAN--The SOFIRAD [Radio Broadcast Financing Company] has taken control of RADIO CARAIBES INTERNATIONAL [RCI], a privately owned station that broadcasts to the Antilles from Sainte-Luce, it was learned early

this week. Created in 1961, this "peripheral" station was broadcasting to Martinique and Guadeloupe and some English-speaking islands (Saint Vincent, Barbados, etc) 18 hours of programming daily. SOFIRAD, a private company that manages state participations in French and foreign audiovisual enterprises, has bought the majority participation in RCI that was held by two French advertising agencies. The new president and general manager of RCI is Mr Jacques Machurot, assistant general manager of SOFIRAD, who is also the administrator of EUROPE 1 IMAGES ET SON. [Text] [Paris LES ECHOS in French 9 Jun 82 p 10] 9238

CSO: 5500/2283

END